



Clarke County Fire & EMS Commission
101 Chalmers Court, Suite B
Berryville, Virginia 22611
(540) 955-5132

Minutes

(added to Agenda in orange font)

April 14, 2016

6:30pm

County Government Building – Meeting Room AB

Present: Van Armacost, Bryan Conrad, Frank Davis, Matt Hoff, Beth Leffel (Chair), Tony Roper, Laure Wallace, David Weiss

Meeting was called to order by the Chair at 6:30pm.

1. Approval of Agenda
Motion for approval by Ms. Wallace; second by Mr. Hoff. Unanimous vote to approve.
2. Approval of Minutes – February 29, 2016 and March 10, 2016
Motion for approval of February 29th minutes by Mr. Hoff; second by Mr. Armacost. Unanimous vote to approve. Motion for approval of March 10th minutes by Mr. Hoff; second by Ms. Wallace. Unanimous vote to approve.
3. Administrative no items for discussion
4. Presentation from Omnicom (Technology Committee)
Mr. Chris Monzingo of Omnicom Consulting Group presented the draft report entitled, “Gap Analysis and Recommendations Report”. Questions were answered from Commissioners and then the floor was opened for questions from any member of the public. (Attachment 1 – Presentation)
 - a. Action Item – Mr. Monzingo was requested to write a cost analysis for the two scenarios and present it at the next Technology Committee meeting. Sheriff Roper will report the outcome and committee recommendation(s) at the Commission meeting on June 9, 2016.
5. Unfinished Business
 - a. Budget estimates for Strategic Plan priorities
 - b. 2016 Annual Operating Plan (AOP) draftA draft AOP (Attachment 2) was circulated but not discussed due to the late hour. The items were selected based on priorities identified by the Commission and the FY17 budget request. Ms. Wallace volunteered to compare the additional budget estimates provided by Mr. Davis and the priority document to identify any additional needs that could be addressed in FY17 without incurring cost.
6. Report from the Director of Fire and EMS (Frank Davis) – Attachment 3



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7. Report from the Fire and Rescue Association Representatives (Matt Hoff and Van Armacost) –
no report
8. Committee Reports
 - a. Performance Standards (Beth Leffel) – no report
 - b. Technology Committee (Tony Roper) – no report
 - c. Budget Committee (Matt Hoff) – no report
9. New Business
Town of Berryville Budget: there is grave concern about the impact of the Town withdrawing financial support (~\$70,000) for a full-time paramedic stationed at Company 1. The Chair was tasked to speak at the next finance committee meeting, if there was one, prior to the final vote on the budget. [After meeting note: there was not a meeting, no action to report.]
10. Adjourn
Motion to adjourn at 7:42pm by Sheriff Roper; second by Ms. Wallace. Unanimous vote for approval.

The next regular Commission meeting is scheduled for April 28, 2016 at 6:30pm.



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Attachment 1: Omnicom Presentation



Gap Analysis and Recommendations Report Presentation for E911 Communications Consulting

April 14, 2016

Introductions

- **Chris Monzingo, P.E., PMP**
 - Project Manager, with 22 years of professional experience

Agenda

- **Introductions**
- **Project Overview**
- **Scope and Tasks Review**
- **OCG Deliverables**
- **Stakeholder Interviews**
- **Site Surveys**
- **Current VHF System**
- **Proposed System Improvements**
- **Budgetary Costs Estimates for System Improvements**
- **Q/A**

Project Overview

Phase 1: Operational / Functional Needs Analysis

1. OCG will work with the Clarke County Sheriff's Department and E911 Department to identify and analyze all of the departments' communication, dispatching and radio operation equipment.
2. OCG will create a gap analysis of existing system compared to required and recommended systems, and provide a cost estimate for the County budgeting process
3. OCG will analyze and make recommendations regarding the County's current tower lease versus moving to a new lease site or other County owned property. The analysis will detail any changes in coverage plus required backbone changes/upgrades.
4. OCG will analyze and make recommendations regarding the County adding an additional communication site at the Millwood Water Tank. The analysis will detail any changes in coverage plus required backbone changes/upgrades.

Scope of Work and Tasks Review

- **Task 1: Kickoff Meeting and Technology Review**
 - Department Interviews
 - Dispatch and Communication Site Surveys
- **Task 2: Review System Architecture and Backhaul Configuration**
- **Task 3: Develop Radio Coverage Prediction Maps**
- **Task 4: Develop Radio System, Backhaul and System Drawings**
- **Task 5: Develop System Implementation Costs, Estimated Maintenance and Operational Costs for a 15-year System Life Cycle**
- **Task 6: Develop Gap Analysis and Recommendations Report**

OCCG Deliverables

- **Phase 1: Operational / Functional Needs Analysis**
 - Gap Analysis and Recommendations Report
 - Presentation of Report to County Stakeholder Group

Clarke County Stakeholder Interviews

- **Clarke County Sheriff's Office**
 - Pam Hess, Communications Director, Travis Sumption, Chief Deputy, Sheriff Tony Roper
- **John H. Enders Fire Company**
 - Harold Rohde, Chief , Jay Arnold
- **Boyce Volunteer Fire Company**
 - Matt Hoff, Bryan Conrad
- **Blue Ridge Volunteer Fire Company**
 - Jason Burns, Chief, Mike
- **Town of Berryville Police Department**
 - Neal White, Chief of Police
- **Clarke County Fire EMS Director**
 - Frank Davis, Director Clarke County Fire EMS

Clarke County Stakeholder Interviews

Common Topics with High Levels of Interest :

- The need for reliable portable radio coverage throughout their jurisdictional area
- The need for an additional repeater channel for tactical operations
- The need for interoperability across frequency bands and communication system technologies
- The need for improved more reliable site connectivity
- The need to replace system components that are at or nearing their end of life of manufacturer's support

Clarke County Site Surveys

- **Springsbury Road**
 - Main Transmit/Receive Site
 - High lease fees for both tower space and site connectivity
- **Dispatch**
 - Existing tower structure will likely have to be replaced to support a new microwave backhaul connectivity network
- **Millwood Water Tank**
 - New water tank the County can possibly utilize to improve system coverage
 - The County has reserved space for both antennas and system equipment
- **Shentel Tower**
 - The County has “free” space available on the tower for antennas
 - Site improvements could be a substantial investment

[illegible]

[illegible]

This is a detailed topographic map of the Winchester, Virginia area. The map shows the Shenandoah River winding through the landscape, with numerous roads and landmarks labeled. Key locations include Winchester, Stephenson, and Berryville. The map also shows the state boundaries of Virginia, West Virginia, and Maryland. A scale bar in miles and kilometers is provided in the bottom left corner.

This map shows the Winchester, Virginia area, including parts of Berkeley, West Virginia, and Loudoun County, Virginia. Key features include:

- Winchester, Virginia:** Located at the top of the map, featuring the Winchester Regional Airport and several major roads.
- Berkeley, West Virginia:** Located to the east of Winchester, with the Main Tower and Berryville.
- Loudoun County, Virginia:** Located to the south of Winchester, featuring Sky Meadows State Park and Mt. Weather.
- Blue Ridge Mountains:** A prominent feature running through the center of the map.
- Roads:** Major roads shown include Shenandoah Rd, Gun Barrel Rd, Boyce Rd, and Sky Meadows Rd.
- Scale and Orientation:** A scale bar in the bottom left corner indicates distances in miles (0 to 5) and kilometers (0 to 8). A north arrow is also present.

Proposed System Improvements

- **OCCG has proposed the following system improvements**
 - Two-Site Simulcast Transmit, Three-Site Receive
 - (4) P25 Digital Voice Channels
 - (1) Analog Paging Channel
 - New Licensed 6GHz Microwave for Backhaul Connectivity
 - New P25 Conventional Core and Simulcast Control Equipment
 - New Dispatch Consoles

- **Site Option 1:**

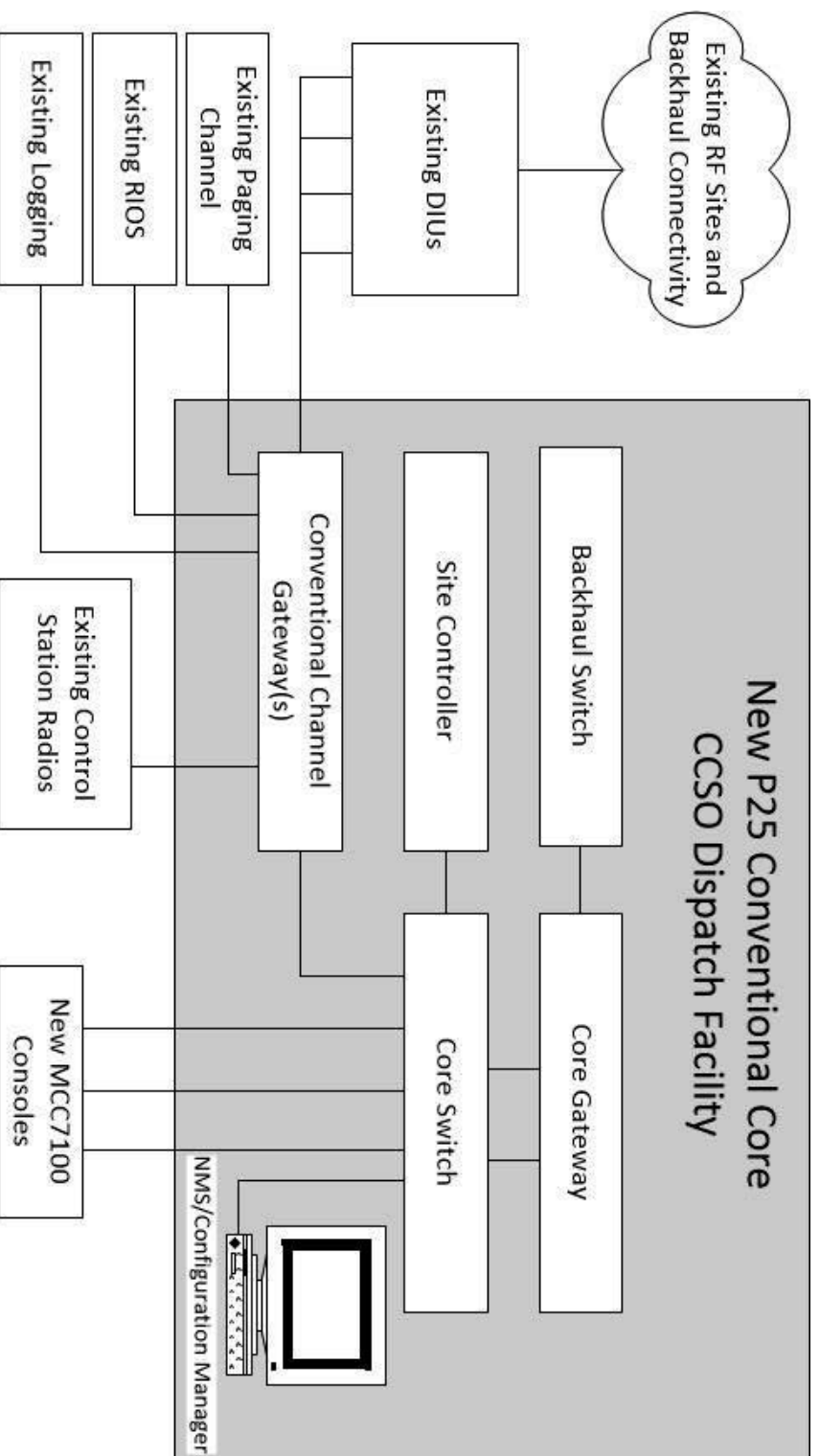
- Shentel Tower for Transmit and Receive
- Millwood Water Tank for Transmit and Receive

- **Site Option 2:**

- Shentel Tower for Transmit and Receive
- Double Toll Tower (New Greenfield Tower) for Transmit and Receive

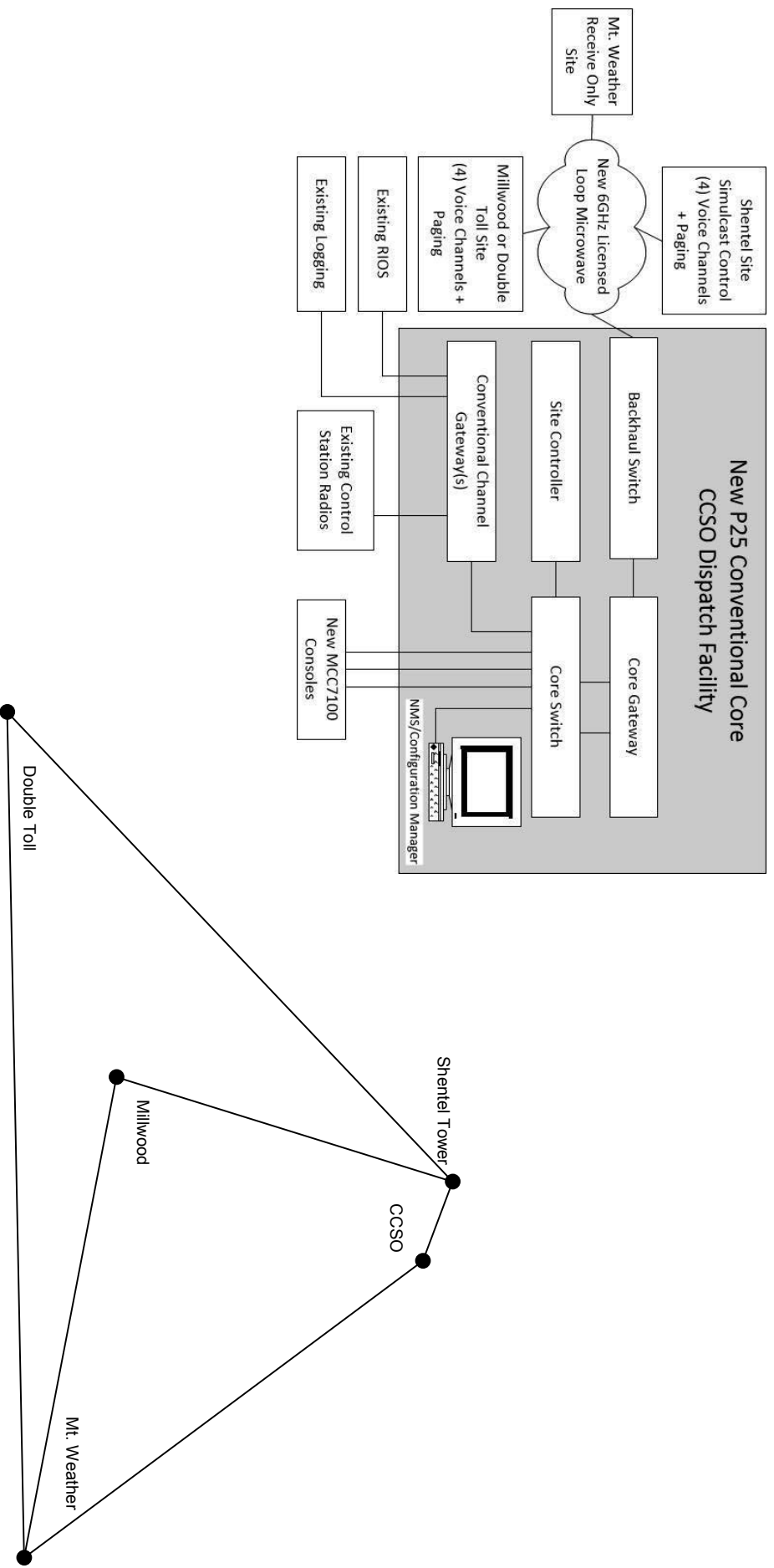
Proposed System Improvements

- **Phased Migration Approach:**
 - Dispatch Upgrade and P25 Conventional Core Implementation

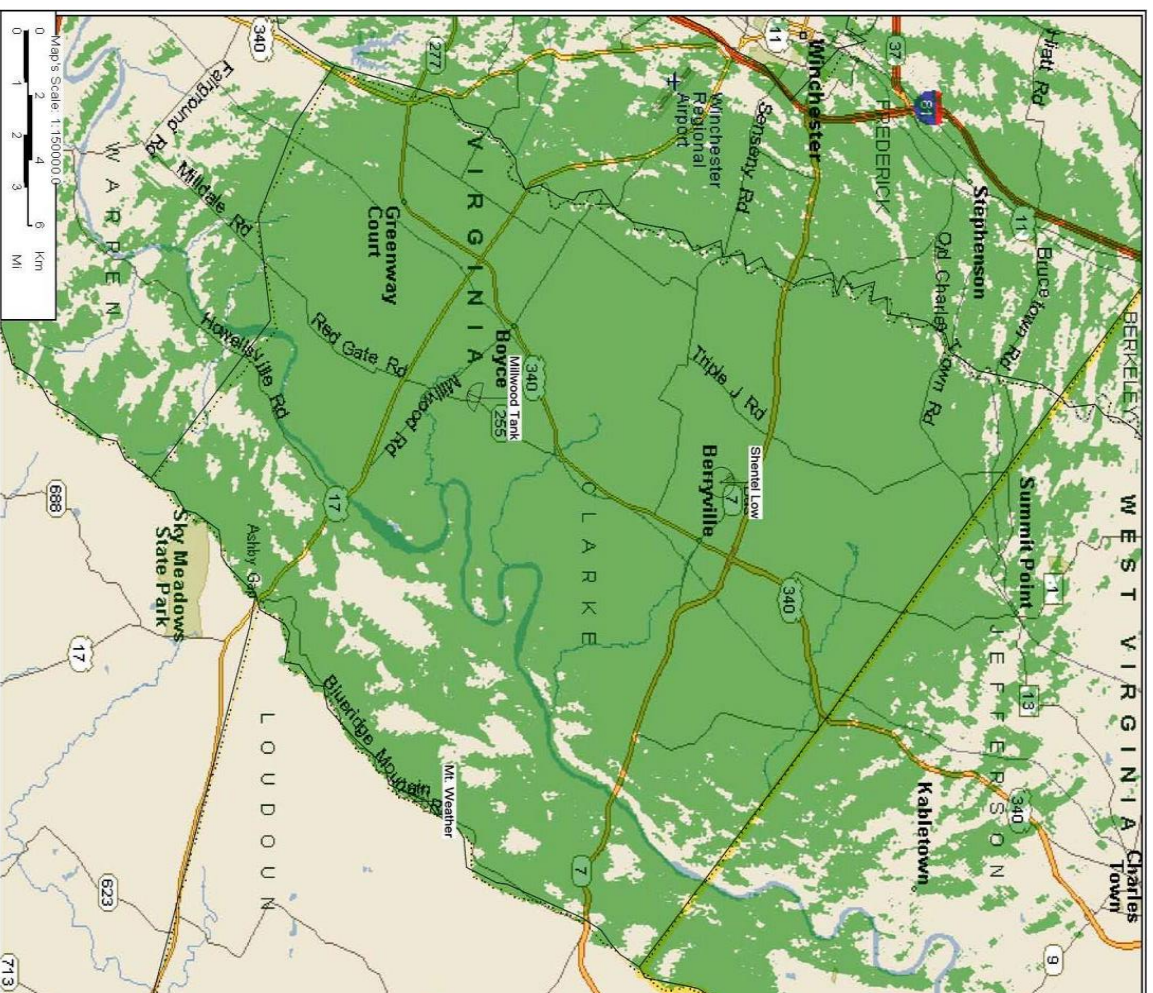


Proposed System Improvements

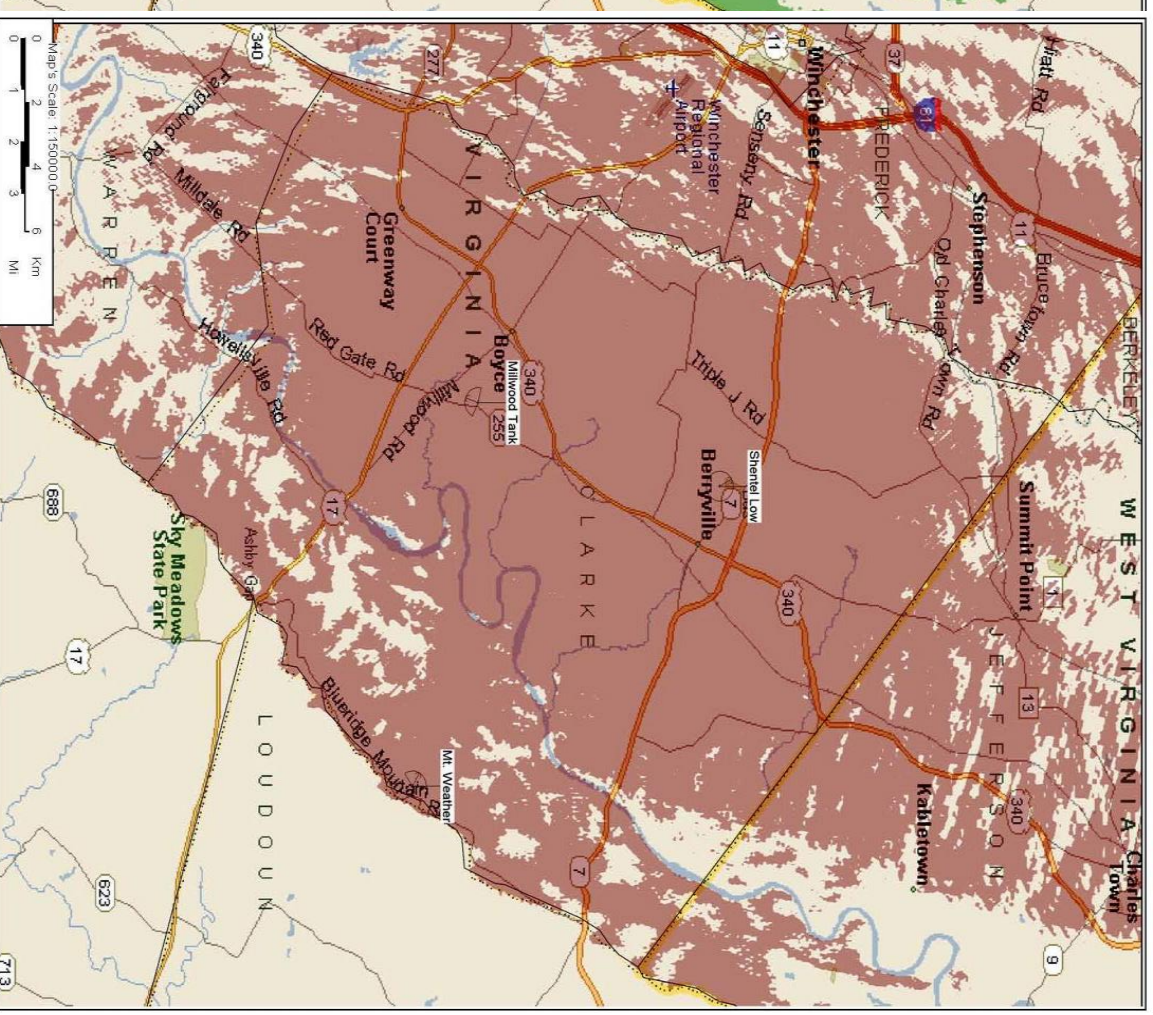
- **Phased Migration Approach:**
 - Simulcast System and 6GHz Licensed Microwave Implementation



Radio Coverage for Site Option 1

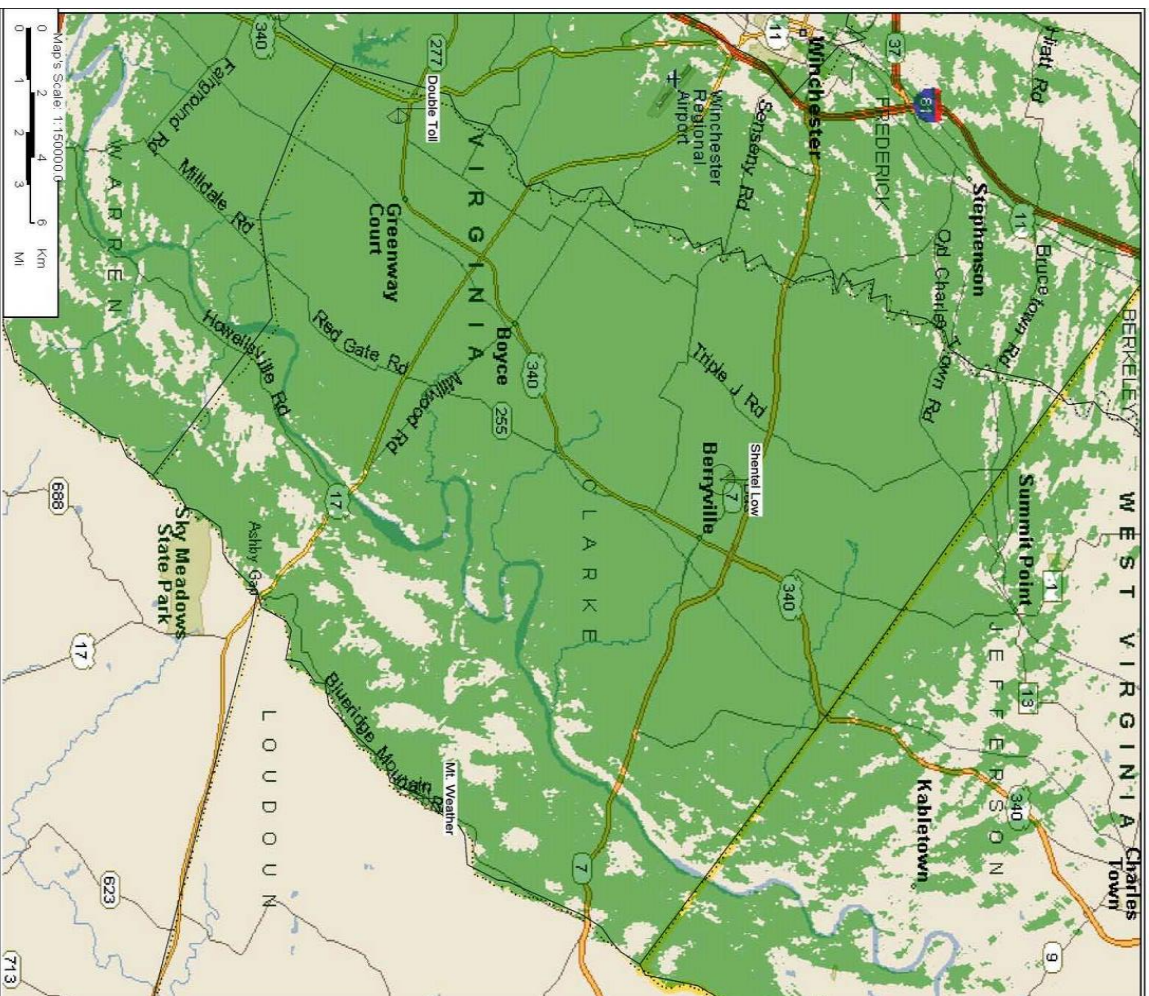


Talk Out to Portable 91.6%

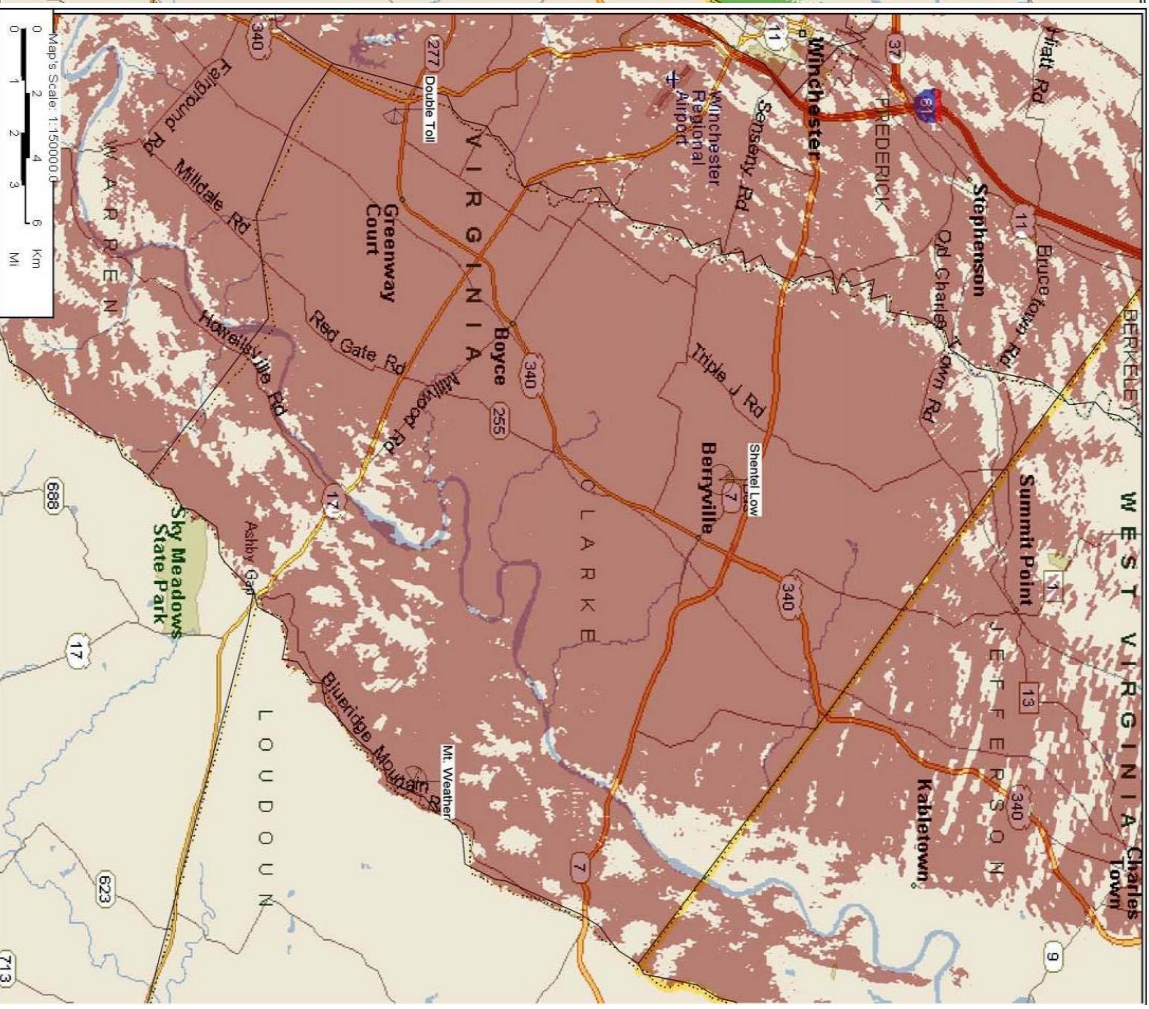


Talk Back from Portable 88.9%

Radio Coverage for Site Option 2



Talk Out to Portable 91.3%



Talk Back from Portable 89.4%

Budgetary Cost Estimate for Site Option 1

Engineer's Budgetary Cost Estimate	
Date Prepared : March 28, 2016	
Prepared By: Omnicom Consulting Group, Inc.	
Two-Site, Four-Channel Simulcast and 1-Channel Analog Paging, Three Dispatch Positions	
Total Control Equipment:	\$ 208,000.00
Total Dispatch Equipment:	\$ 80,000.00
Total Communications Site Development:	\$ 177,900.00
Total Remote Site Equipment:	\$ 298,220.00
Total Antenna Network Equipment:	\$ 50,743.26
Total Microwave Network Equipment:	\$ 74,121.60
Total System Training:	\$ 5,000.00
Total Recommended Spares:	\$ 14,221.70
Total Contingency:	\$ 44,449.24
Total Project Management, Engineering and Implementation:	\$ 222,246.22
TOTAL SYSTEM INFRASTRUCTURE AND DISPATCH:	\$ 1,174,902.02
On-going Maintenance Costs	
System Maintenance Infrastructure and Dispatch years 2-15	\$ 717,362.66
Technology Refresh Year 5	\$ 25,000.00
Technology Refresh Year 11	\$ 27,500.00
Total System Maintenance Including Technology Refreshes Years 2-15:	\$ 769,862.66
Total Cost of Ownership System Infrastructure and Dispatch for 15 years:	\$ 1,944,764.68

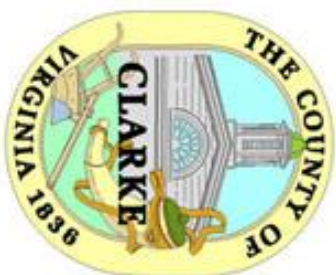
Budgetary Cost Estimate for Site Option 2

Engineer's Budgetary Cost Estimate	
Date Prepared : March 28, 2016	
Prepared By: Omnicom Consulting Group, Inc.	
Two-Site, Four-Channel Simulcast and 1-Channel Analog Paging, Three Dispatch Positions	
Total Control Equipment:	\$ 208,000.00
Total Dispatch Equipment:	\$ 80,000.00
Total Communications Site Development:	\$ 712,000.00
Total Remote Site Equipment:	\$ 298,220.00
Total Antenna Network Equipment:	\$ 50,743.26
Total Microwave Network Equipment:	\$ 74,121.60
Total System Training:	\$ 5,000.00
Total Recommended Spare:	\$ 14,221.70
Total Contingency:	\$ 71,154.24
Total Project Management, Engineering and Implementation:	\$ 355,771.21
TOTAL SYSTEM INFRASTRUCTURE AND DISPATCH:	\$ 1,869,232.01
Ongoing Maintenance Costs	
System Maintenance Infrastructure and Dispatch years 2-15	\$ 717,362.66
Technology Refresh Year 5	\$ 25,000.00
Technology Refresh Year 11	\$ 27,500.00
Total System Maintenance Including Technology Refreshes Years 2-15:	\$ 769,862.66
Total Cost of Ownership System Infrastructure and Dispatch for 15 years:	\$ 2,639,094.67

Budgetary Cost Estimate Phased Migration

Recommended System Improvements Option 1		
Phase Number	Phase Description	Approximate Costs
1	Implement a new P25 conventional core and dispatch consoles	\$374,816.00
2a	Infrastructure improvements and buildout of two simulcast sites	\$673,395.00
2b	Implement a new FCC-licensed 6 GHz microwave backhaul network	\$107,470.00
2c	Equipment spares and system training	\$19,221.00

Recommended System Improvements Option 2		
Phase Number	Phase Description	Approximate Costs
1	Implement a new P25 conventional core and dispatch consoles	\$374,816.00
2a	Infrastructure improvements and buildout of two simulcast sites	\$1,367,724.00
2b	Implement a new FCC-licensed 6 GHz microwave backhaul network	\$107,470.00
2c	Equipment spares and system training	\$19,221.00



QUESTIONS?





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Attachment 2: Annual Operating Plan – Working Paper



2016-2017 PROJECT PRIORITIES – Fire & EMS COMMISSION
(adopted DATE)

The list is intended to aid the Commission and Staff to ensure that work on critical projects is ranked and completed in a timely fashion. Projects are aligned with Goals 1 and 2 of the Strategic Plan which have been prioritized by the Commission. Project start dates and priorities may be affected by the Department's budget, Commission's case load, text amendments, or other special projects requested by the Board of Supervisors.

1. Progress the strategic vision and leadership of the Department by:
 - a. Fund and support the position of Director of Clarke County Fire and EMS
 - b. Fund and support the position of Fire & EMS Billing Coordinator
 - c. Provide effective and regular communications throughout the organization by expand the Department website and maintaining it routinely to ensure information is timely and accurate
2. Improve Fire and Operations across the Department by unifying the system and ensuring that sufficient staff is available to meet the needs of the community:
 - a. Purchase a county-wide Facility and Apparatus Insurance Policy which includes equivalent coverage for all volunteer companies and County investments
 - b. Provide standardized uniforms and safety equipment (e.g., turnout gear) for personnel
 - c. Implement IAMRESPONDING technology and utilize with 100% of volunteers by June 30, 2017
 - d. Develop a Paramedic-in-the-Community program by having at least two volunteer paramedics participating by June 30, 2017



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Attachment 3: Director's Report

Directors Report

April 14, 2016

- Annual All-Hands meetings was held April 2, 2016 with 35 Fire/EMS personnel in attendance.
- Working on new Mutual Aid Agreements with surrounding jurisdictions
- Kick-off meeting on April 19th with FEMA in regards to reimbursement for snow storm expenditures.
- Regional Training Center is progressing with hopes of beginning construction in August.
- Starting the first Friday and Saturday in May the career staff will be at the County Park and Food Lion conducting Blood Pressure checks and distributing Fire Safety literature. This will continue until October after Fire Prevention Week.
- Attending meetings with the City of Winchester and Frederick County for planning of a major regional training drill in September. All volunteer departments will be participating.



Division of Fire and Rescue Services ***Response Review Report*** ***March 1, 2016 – March 31, 2016***

Station	AM Count	PM Count	WK Count	Total Count	AM Fail Count	PM Fail Count	WK Fail Count	Total Fail Count	AM Pct.	PM Pct.	WK Pct.	Total Pct.
Enders-Fire	17	11	5	33	4	2	1	7	23.5%	18.2%	20%	21.2%
Enders-EMS	52	37	23	112	1	1	1	3	1.9%	2.7%	4.3%	2.7%
Boyce-Fire	8	6	2	16	1	1	0	2	12.5%	16.7%	0%	12.5%
Boyce-EMS	24	6	11	41	2	1	1	4	8.3%	16.7%	9.1%	9.6%
Blue Ridge-Fire	10	3	5	18	3	1	1	5	30%	33.3%	20%	27.8%
Blue Ridge-EMS	12	6	5	23	2	0	3	5	16.7%	0%	60%	21.7%